The Mollusca of Stewart Island.

By A. W. B. POWELL, Assistant Director.

This paper is primarily the outcome of a field trip to Stewart Island in October and November, 1934, as the guest of Captain G. M. Turner, who generously made available his launch for dredging work, as well as making possible a fairly comprehensive survey of the coastal areas of the eastern and western sections of the island. Material from the Southern section and Foveaux Strait was available from dredgings in the writer's collection collected many years ago by the late Mr. Augustus Hamilton, as well as from material recently collected by Mrs. R. H. Harrison, of Stewart Island. Mrs. Harrison has been of great assistance in collecting shell-sand samples from a wide range of localities, in securing from time to time material cast ashore after storms, as well as deeper water species obtained from fishing-vessels.

The molluscan fauna of Stewart Island for its latitude (47°S.) is a particularly rich one, very noticeable features being the large size and brilliant colouring of many of its species. This applies equally well to species that are generally distributed in New Zealand, and also to the echinoid Evechinus chloriticus, the test of one collected being 155 mm. in diameter. The bright colouring of specimens generally is no doubt due to the exceptional clarity of the water, for the dredge could be seen quite plainly on one occasion while being dragged at a depth of eight Two external influences effect the fauna—the cold water west wind drift and to a lesser extent the East Australian warm water current. The latter probably accounts for the occurrence of Xenophalium, Poirieria, Pervicacia and Cabestana spengleri, while the Subantarctic element has been strengthened by the record herein of eight additional species; those of Subantarctic origin now being as follows (new records are marked with an asterisk):—Lissarca, Chlamys campbellicus*, Gaimardia, Kidderia*, Costokidderia*, Cyamiomactra, Condylocardia, Margarella, Maurea spectabilis*, Macquariella*, Skenella, Venustilifer*, Marinula striata*, Kerguelenia* and Onchidella campbelli.

For the loan of specimens from the Suter collection in the Wanganui Museum the writer is greatly indebted to Mr. J. Grant. In the faunal list which follows the numbers refer to my check list in "The Shellfish of New Zealand," 1937, The Unity Press Ltd., Auckland; an asterisk signifies that I have examined the material; the symbols in brackets following the name refer to the locality list, and a "T" indicates that the locality cited is the source of the type.

The list comprises 383 species, a considerable fauna for a single area in New Zealand. Twenty-one new species and a new subspecies are described, and five new genera and a new subgenus are proposed.

LIST OF STEWART ISLAND MOLLUSCA. PELECYPODA.

Solemya (Zesolemya†) parkinsoni Smith 1874 (D-21). Nucua ci. hartingiana Fieiffer 1864 (D-4, F-4). *3. Nucuta nitidula A. Adams 1856 (D-21). Nucula strangei A. Adams 1856 (F-4). *5. Nucula castanea A. Adams 1856 (15, 24) *6. Nucula dunedinensis Finlay 1928 (3, 24, 25). *12.1 Austronucula schencki Powell n. gen. & sp. (15, 26T). *13. Nuculana bellula (A. Adams 1856) (D-11, F-2). *18. Nucinella maoriana Hedley 1904 (D-11). Neilo australis (Q. & G. 1835) (D-1, D-2, D-4, D-11). Acar sandersonae Powell 1933 (D-22). *20. 27. *28. Arca novaezelandiae Smith 1915 (3). *29. Glycymeris (Grandaxinea) laticostata (Q. & G. 1835) (F-3). *30. Glycymeris (Glycymerula) modesta (Angas 1879) (1). *37. Lissarca stervartiana Powell 1935 (15). 38. Lissarca? trapesina (Bernard 1897) (D-20T). Austrosarepta harrisonae (Powell 1927) (15). Hochstetteria meleagrina Bernard 1896 (15, D-20T, F-4). *39. *41. *47. Cosa costata (Bernard 1896) (15, D-20T). Cosa costata (Bernard 1896) (15, D-201).
Cosa filholi (Bernard 1897) (15, D-20T).
Perrierina taxodonta Bernard 1897 (15, D-20T).
Legrandina harrisonae Powell 1935 (15T).
Legrandina turneri Powell n. sp. (11T).
Mytilus canaliculus Martyn 1784 (3).
Mytilus planulatus Lamarck 1819 (2, 3).
Aulacomya maoriana (Iredale 1915) (2, 12).
Modialus pascalanicus (Iredale 1915) (15) 48. *54. *59. *59.1 *60. *61. *62. *63. Modiolus neoselanicus (Iredale 1915) (15), *64. Modiolus arcolatus (Gould 1850) (3). *66. Musculus impactus (Hermann 1782) (3). Pecten (Notovola) medius Lamarck 1819 (13). Chlamys suprasilis Finlay 1928 (15). *71. *73. *74. Chlamys celator Finlay 1928 (20T). *75. Chlamys radiatus (Hutton 1873) (D-1, D-2, D-15T). *76. Chlamys dichrous (Suter 1909) (D-14T). *79. Chlamys campbellicus Odhner 1924 (15). *82. Pallium (Mesopeplum) convexus (Q. & G. 1835) (15). Cyclopecten (Cyclochlamys) transenna (Suter 1913) (15).
Lima zelandica Sowerby 1876 (1).
Limatula maoria Finlay 1926 (20).
Limatula suteri (Dall 1908) (D-11T).
Ostrea sinuata Lamarck 1819 (D-5, F-4). *84. *88. *91. *92. *96. *99. Atrina zelandica (Gray 1835) (12). *102. Gaimardia forsteriana Finlay 1926 (15). Kidderia rakiura Powell n. sp. (1T, 15). *105.1 *109. Neogaimardia minutissima (Iredale 1908) (15). Costokidderia lyallensis Finlay 1926 (15). Hamacuna* otagoensis (Powell 1927) (D-6). *113. *117. *118. Cuna laqueus Finlay 1926 (F-2). *124. Cyamiomactra problematica Bernard 1897 (D-20T). *125. Cyamiomactra problematica truncata Suter 1907 (F-2). *126. Cardita aoteana Finlay 1926 (20-T). *129. Venericardia purpurata difficilis (Deshayes 1854) (1). Pleuromeris zelandica (Deshayes 1854) (D-8, D-11). Pleuromeris marshalli Marwick 1924 (F-1, F-5). *131.

†Iredale, T., 1939. Great Barrier Reef Expd. (Brit. Mus. Nat. Hist.) 5, No. 6, Moll. Pt. 1, p. 233
*Cotton, B. C., 1931 Rec. S. Austr. Mus. 4, No. 3, p. 350.

*135. Verticipronus mytilus Hedley 1904 (15). *136. Condytocardia concentrica Bernard 1897 (1, 15, 26, D-20T). *137. Condylocardia crassicosta Bernard 1896 (1, 15, D-20T). *141. Benthocardiella obliquata Powell 1930 (15). *146.1 Benthocardiella rakiura Powell n. sp. (11T). *147. Gonimyrtea concinna (Hutton 1885) (F-2). Divaricella (Divalucina) cumingi (Ad. & Ang. 1863) (20). Zemysia rakiura Powell n. sp. (1T). *149. *151.1 *152. Zemysia (Zemysina) globus Finlay 1926 (20T, D-1, D-2). *154. Thyasira (Prothyasira) peroniana peregrina Iredale 1930 (D-1, D-2, D-11). 155.1 Thyasira (Parathyasira) otagoensis (Suter 1913) (D-8). *158. Lasaca hinemoa Finlay 1928 (13, 16, 25). *159. Lasaca maoria Powell 1933 (24) *161. Marikellia rotunda (Deshayes 1856)‡ (12, 15). *162. Pachykellya edwardsi Bernard 1897 (15, D-20T). *167. Puyseguria cuncata Powell 1927 (11). *168.1 Puyseguria tani Powell n. sp. (11T, 15, 26). *169. Arthritica bifurca (Webster 1908) (F-4). *171. Melliteryx parva (Deshayes 1856) (3, 15, 26). *174. Zemyllita stowei (Hutton 1873) (20, F-2). *175. Mysella unidentata (Odhner 1924) (15, 26) Rochefortula decapitata Powell n. sp. (26T). Notolepton antipodum (Filbol 1880) (15, F-2). Notolepton sanguineum (Hutton 1883) (F-1T, F-2, 15, 25). *182.1 *184. *185. Scintillona zelandica (Odhner 1924) (D-1, D-8). *191. Hyridella mensiesi (Gray 1843) (20). *197. *209. Macomona liliana (Iredale 1915) (12) *215. Maoritellina huttoni sterrha (Suter 1913) (D-1, F-2). Zearcopagia disculus (Deshayes 1855) (15). Leptomya retiaria (Hutton 1885) (18, D-1, D-12). *216. *217. *218. Amphidesma subtriangulata (Wood 1828) (2) *221. Amphidesma (Paphies) australis (Gmelin 1791) (2, 12). Mactra discors Gray 1837 (12). *223. *224. Mactra ovata (Gray 1843) (12). *225. Longimactra elongata (Q. & G. 1835) (D-5). *227. Scalpomactra scalpellum (Reeve 1854) (1). Spisula aequilateralis (Deshayes 1854) (15). Dosinia (Austrodosinia) anus (Philippi 1848) (15). *228. *232. *233. Dosinia (Phacosoma) subrosca (Gray 1835) (20). *234. Dosinia (Phacosoma) maoriana Oliver 1923 (21). 235. Dosinia (Kercia) greyi Zittel 1864 (19). *236. Notocallista (Striacallista) multistriata (Sowerby 1851) (D-1, D-2). *239. Tawera spissa (Deshayes 1835) (2, 12, D-1, D-2). *243. Pleurigens phenax Finlay 1930 (D-10). *245. Chione (Austrovenus) stutchburyi (Gray 1828) (11, 12, 13). Protothaca (Tuangia) crassicosta (Deshayes 1835 (2, 3). Paphirus largillicrti (Philippi 1849) (2). *248. *250. *251. Notirus reflexa (Gray 1843) (3) *252. Nemocardium (Pratulum) pulchellum (Gray 1843) (1, D-2). Gari lineolata (Gray 1835) (15). *253. *254. Gari stangeri (Gray 1843) (2, 3). Ascitellina urinatoria (Suter 1913) (D-7, F-2). *255. Soletellina nitida (Gray 1843) (20). Notocorbula zelandica (Q. & G. 1835 (1). Hiatella australis (Lamarck 1818) (D-4). *256. *260. *261. Panopea zelandica Q. & G. 1835 (1). Anchomasa similis (Gray 1835) (4). *263. *264. Eximiothracia vitrea (Hutton 1873) (1, 20). *269. 270. Eximiothracia transenna (Suter 1913) (D-1, D-13T). Parvithracea suteri Finlay 1927 (D-11T). 271. Offadesma angasi (Crosse & Fischer 1864) (12). Myadora novaezelandiae E. A. Smith (D-21T). Myadora striata (Q. & G. 1835) (2). *273. 277. *278.

Myadora subrostrata Smith 1880 (20, D-4). Cuspidaria trailli (Hutton 1873) (F-2).

*279.

*282.

*481.

*483.

GASTEROPODA.

*293. Scissurona rosea (Hedley 1904) (15). *295. Sinezona laevigata (Iredale 1908) (15). *298. Schismope lyallensis Finlay 1926 (15). *299. Schismope laqueus Finlay 1926 (15). *300. Schismope iota Finlay 1926 (15). Haliotis iris Martyn 1784 (6). *301. *302. Haliotis australis Gmelin 1790 (6). *303. Haliotis virginea Gmelin 1790 (6). *305. Incisura lytteltonensis (Smith 1894) (7, 15). Emarginula striatula (Q. & G. 1834) (1). *306. *308.1 Tugali stewartiana Powell n. sp. (1T). *314. Monodilepas monilifera (Hutton 1873) (D-2, D-9, D-16T, F-2). *320. Puncturella (Vacerra) demissa Hedley 1904 (15, F-1T). *322. Scutus breviculus (Blainville 1817) (3). *323. Trochus (Coelotrochus) tiaratus Q. & G. 1834 (1, D-2). *324. Trochus (Thorista) viridis (Gmelin 1791) (15). *326. Thoristella chathamensis (Hutton 1873) (1, 3). Thoristella chathamensis dunedinensis (Suter 1917) (15). Thoristella chathamensis benthicola Finlay 1926 (F-4). Melagraphia aethiops (Gmelin 1791) (3). *327. *329. *336. *337. Zediloma digna Finlay 1926 (14, 19). *338. Zediloma arida Finlay 1926 (1). *339. Zediloma (Fractarmilla) corrosa (A. Adams 1853) (12). *341. Zediloma (Fractarmilla) atrovirens (Philippi 1851) (12, 14). *345. Anisodiloma lugubris lenior Finlay 1926 (12). Cantharidus opalus (Martyn 1784) (1, 2). *346. *352. Micrelenchus sanguineus (Gray 1843) (D-3). Micrelenchus sanguineus caelatus (Hutton 1884) (F-1T, F-2, F-4). *353. *357. Micrelenchus tenebrosus (A. Ad. 1853) (13, D-3). *358. Micrelenchus huttoni (Smith 1876) (D-3) Micrelenchus dilatatus (Sowerby 1870) (3). *361. *363. Cantharidella tesselata (A. Adams 1851) (1, 14, 15). *369.1 Margarella turneri Powell n. sp. (29-T). Margarella decepta (Iredale 1908) (1, 7). *370. Maurea waikanae (Oliver 1926) (2). Maurea (Mucrinops) spectabilis (A. Adams 1855) (2, F-17). *380. *381. Maurea (Mucrinops) punctulata urbanior Finlay 1926 (15, F-12T). *384. *384.1 Maurea (Mucrinops) punctulata ampla Powell n. subsp. (15T). Antisolarium egenum (Gould 1849) (1). *392. *393. Zethalia zelandica (A. Adams 1854) (1, 2). Lodderia eumorpha (Suter 1908) (D-5). Elachorbis diaphana Finlay 1924 (F-4, F-11T). *401. 403. *406. Liotella polypleura (Hedley 1904) (15). Zalipais lissa (Suter 1908) (15). *427. *428. Zalipais parva Finlay 1924 (15). *428.1 Zalipais turneri Powell n. sp. (7T, 15). *430. Cirsonella densilirata Suter 1908 (F-2). *439. Conjectura glabella (Murdoch 1905) (F-2). *446. Orbitestella hinemoa Mestayer 1919 (11, F-4, F-11) *448. Argalista fluctuata (Hutton 1883) (2, D-4, F-2, F-8T). *455. Lunella smaragda (Martyn 1784) (3). *456. Modelia granosa (Martyn 1784) (1). *457. Astraea heliotropium (Martyn 1784) (1, F-4). *458. Cookia sulcata (Martyn 1784) (3). 463. Notocrater craticulata (Suter 1908) (D-11). *468. Patelloida corticata (Hutton 1880) (3, 15). *471. Asteracmea suteri (Iredale 1915) (15). *472. Radiacmea inconspicua (Gray 1843) (3, 9). *479. Notoacmea pileopsis sturnus (Homb. & Jacq. 1841) (12).

Notoacmea (Parvacmea) daedala (Suter 1907) (5).

Notoacmea (Parvacmea) helmsi (Smith 1894) (4).

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*486.
         Notoacmea (Conacmea) parviconoidea (Suter 1907) (4).
*489.
         Atalacmea fragilis (Sowerby 1823) (3).
Atalacmea multilinea Powell 1934 (15).
*490.
*491.
         Cellana radians (Gmelin 1791) (3).
*494.
         Cellana stellifera (Gmelin 1791) (3, 14).
*497.
         Celana ornata (Dillwyn 1817) (3).
         Cellana redimiculum (Reeve 1854) (3, 14).
Melarhaphe cincta (Q. & G. 1833) (1).
Macquariella aucklandica Powell 1933 (16).
*498.
*519.
*524.
*525.
         Zelaxitas cystophora (Finlay 1924) (7, 15).
*527.1.
           Zelaxitas rissoaformis Powell n. sp. (7T).
         Risellopsis varia (Hutton 1873) (5, 15).
*528.
 534.
         Zeradina (Radinista) corrugata (Hedley 1904) (F-1T).
Subonoba foveauxiana (Suter 1898) (15, 26, F-2T).
*544.
*545.
         Subonoba fumata (Suter 1898) (15).
*547.
         Subonoba insculpta (Murdoch 1905) (26).
Estea subfusca (Hutton 1873) (18-T, D-11).
*557.
*558.
         Estea micronema (Suter 1898) (D-16T).
*561.
         Estea minor (Suter 1898) (8, 15, F-1T)
*576.
         Haurakia huttoni (Suter 1898) (15, 19-T, D-4, F-2).
*582.1
          Merelina harrisonae Powell n. sp. (1T).
         Merelina maoriana Powell n. sp. (15, D-4, F-2, F-7).
Merelina superba Powell 1927 (F-2).
*583.1
*585.
*597.
         Anabathron foliatum (Suter 1908) (15)
*605.
         Lironoba suteri (Hedley 1904) (15, F-2T)
*612.
        Notosetia lubrica (Suter 1898) (F-2T, F-11).
*614.
         Notosetia stewartiana (Suter 1908) (D-11T).
*615.
         Notosetia infecta (Suter 1908) (15).
*617.
         Notosetia neozelanica (Suter 1898) (8, D-21T, F-1).
*620.
         Notosetia verecunda (Suter 1908) (7, 15).
        Scrobs hedleyi (Suter 1908) (15).
Scrobs trailli Powell n. sp. (15T).
Scrobs elongata Powell 1927 (15).
*637.
*639.1
*640.
        Dardanula olivacea (Hutton 1882) (7, 15).
Dardanula roseola Iredale 1915 (15, 18-T, D-4, D-11, F-2).
*649.
*654.
*665.
        Brookesena neozelanica (Suter 1908) (F-4, F-7).
*666.
        Larochella toreuma Powell 1927 (15).
        Skenella pfefferi Suter 1909 (7).
*668.
         Rissoina chathamensis (Hutton 1873) (3, 18-T, 26).
*670.
*687.
        Potamopyrgus antipodum (Gray 1843) (L-13).
        Potamopyrgus badia (Gould 1848) (L-14).
*689.
        Zebittium exile (Hutton 1873) (Ď-19T, É-4).
Zebittium vitreum (Suter 1908) (F-2T).
*702.
 703.
*709.
        Specula canaliculata (Suter 1908) (20).
723.
*728.
         Zaclys acies (Suter 1908) (D-11T)
        Notoseila terebelloides (Hutton 1873) (D-5, F-2).
Lyroseila chathamensis (Suter 1908) (F-2T).
Notosinister infelix (Webster 1906) (19).
 730.
 733.
*736.
        Notosinister (Teretriphora) huttoni (Suter 1908) (D-4, D-19T, F-2).
*745.
         Caecum digitulum Hedley 1904 (15, 26).
        Maoricolpus rosea (Q. & G. 1834) (12, D-1).
Stiracolpus symmetrica (Hutton 1873) (2, 18-T, D-1, D-4).
*746.
*753.
        Struthiolaria papulosa gigas Sowerby 1842 (2).
Neojanacus perplexus Suter 1907 (D-11).
Zegalerus temuis (Gray 1867) (D-1).
Tanea zelandica (Q. & G. 1832) (1, 2, 9).
*754.
 759.
*765.
*767.
        Uberella vitrea (Hutton 1873) (9, 18-T, F-2).
*772.
*782.
        Lamellaria cerebroides Hutton 1883 (23).
*784.
        Trichosirius inornatus (Hutton 1873) (20, F-2).
*790.
        Cabestana (Cymatilesta) spengleri (Perry 1811)
        Argobuccinum tumidum (Dunker 1862) (12, 15).
*799.
        Xenophalium (Xenogalea) pyrum (Lamark 1822) (1).
Xenophalium (Xenogalea) harrisonae Powell 1928 (15T).
*804.
*808.
        Cirsotrema zelebori (Dunker 1866) (19).
Funiscala maxwelli Finlay 1930 (F-2).
822.
*825.
        Zerotula hedleyi (Mestayer 1916) (F-7).
*837.
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842. Odostomia acutangula Suter 1908 (D-11T). *843. Odostomia georgiana (Hutton 1885) (F-2). *858. Evalea liricincta Suter (1908) (D-11T, F-2). *868. Pyrgulina rugata (Hutton 1886) (15, D-4). Chemnitzia zealandica (Hutton 1873) (15, 18-T). 874. 880.18 Chemnitzia rakiura Laws 1937 (22T). Chemnitzia errabunda Laws 1937 (22). 880.1 Eulima murdochi (Hedley 1904) (F-2). Balcis paxillus (Hedley 1904) (D-4, F-2, F-4T, F-7). *882. *885. 894.1 Balcis (Vitreolina) cf. treadwelli (Hutton 1893) (D-16). *898. Venustilifer bountyensis Powell 1933 (15). *903. Glaphyrina vulpicolor (Sowerby 1880) (F-2). Austromitra rubiginosa (Hutton 1873) (15, 20, F-2). *910. Egestas waitei (Suter 1909) (D-6T) 918. Buccinulum pallidum Finlay 1928 (20T).
Buccinulum (Evarnula) marwicki (Finlay 1928) (20).
Buccinulum (Evarnula) marwicki stewartianum Powell 1929 (6, 14-T).
Buccinulum (Euthrena) littorinoides (Reeve 1846) (12, 14).
Buccinulum (Euthrena) strebeli execulptum Powell 1929 (20, F-1). *923. *930. *931. *940. *943. *949. Buccinulum (Euthrena) flavescens (Hutton 1884) (3, 5). Euthrenopsis otagoensis Powell 1929 (F-2). *953. Austrofusus glans agrestior Finlay 1927 (15). Cominella (Eucominia) nassoides (Reeve 1846) (1, 9). *973. *980. *987. Cominella (Cominista) glandiformis (Reeve 1847) (12). Poirieria zelandica (Q. & G. 1833) (19). Zeatrophon ambiguus (Philippi 1844) (2, 3). 998. *1003. *1009. Zeatrophon tmetus Finlay 1930 (20T). *1010. Xymene plebejus (Hutton 1873) (12). *1011. Xymene inferus (Hutton 1873) (12, 18T). Xymenella pusilla (Suter 1907) (D-21).
Axymene turbator Finlay 1926 (3).
Axymene pumila (Suter 1899) (20).
Paratrophon patens (Homb. & Jacq. 1854) (1, 15). 1013. *1014. *1019. *1025. *1026. Comptella curtus (Murdoch 1905) (20, 15). Terefundus crispulatus (Suter 1908) (D-6). 1028. *1031. Terefundus (Minortrophon) crassilirata (Suter 1908) (D-5). 1037. Lepsiella scobina albomarginata (Deshayes 1839) (1, 15). Lepsithais squamatus (Hutton 1878) (5). Lepsithais lacunosa (Bruguiere 1789) (1, 15). Zeadmete trailli (Hutton 1873) (D-16T, F-2) *1038. *1040. *1043. Zemitrella sulcata (Hutton 1873) (4, 18T, D-18). *1047. Zemitrella rosea (Hutton 1873) (9, 18T). *1053. Paxula paxillus (Murdoch 1905) (3). *1061. Paxula transitans (Murdoch 1905) (F-1).
Paxula leptalca (Suter 1908) (20, F-2).
Paxula murdochi Finlay 1926 (3).
Liratilia angulata (Suter 1908) (F-9T).
Macrozafra nodicincta (Suter 1899) (F-9). *1062. *1063. *1065. 1068. 1076. Alcithoe arabica (Martyn 1784) (28). *1080. Alcithoe swainsoni Marwick 1926 (2, 13). *1084. Microvoluta biconica (Murdoch & Suter 1906) (6, 11). 1091. Marginella (Glabella) pygmaea Sowerby 1846 (F-1). Marginella (Volvarina) albescens Hutton 1873 (18T, F-2 Marginella (Volvarina) parvistriata Suter 1908 (F-2T). *1098. *1107. *1108. Marginella (Serrata) lurida Suter 1908 (F-2T) *1115. Marginella (Serrata) stewartiana Suter 1908 (D-11T). Splendrillia aoteana Finlay 1930 (18T, 20, F-2). 1116. *1124. Splendrillia debilis Finlay 1927 (D-11). 1125. Fenestrosyrinx gratiosa (Suter 1908) (D-11T, F-1). *1130. Nepotilla (Zenepos) chariessa (Suter 1906) (D-10). Nepotilla (Zenepos) totolirata (Suter 1908) (F-2T, D-10). Phenatoma (Cryptomella) albula (Hutton 1873) (D-17T, D-21). Inquisitor (?) buchanani maorum (Smith 1877) (F-2). *1132. *1133. *1136. 1138. Stilla flexicostata (Suter 1899) (15, F-2T). *1140. Stilla delicatula Powell 1927 (D-5). *1141.

Mitrithara gemmata (Suter 1908) (15).

*1143.

- *1146. Neoguraleus sinclairi (Smith 1884) (9). *1146.1 Neoguraleus murdochi (Finlay 1924) (D-8). (1171).Neoguraleus amoena (Smith 1884) (19). *1148. Neoguraleus lyallensis (Murdoch 1905) (9). Maorimorpha suteri (Murdoch 1905) (D-5, F-11). Liracraea epentroma (Murdoch 1905) (D-4, F-2). Liracraea dictyota (Hutton 1885) (F-7). Daphnella cancellata Hutton 1878 (19). *1153.1 *1154. *1156. 1157. Comitas trailli (Hutton 1873) (D-17T) (= D. verrucosa Suter 1899, F-2T) (20, D-11, D-21).

 Aoteatilia substriata (Suter 1899) (F-2). *1163. *1164. *1167. Aoteatilia cf. acicula (Suter 1908) (F-2). *1177. Pervicacia tristis (Deshayes 1859) (9).
- 1183. Cavolina telemus (Linnaeus 1758) (15).
- 1200. Pupa alba (Hutton 1873) (19). Cylichnina striata (Hutton 1873) (15, F-2). *1215. 1232. Bouvieria aurantiacus (Risso 1818) (27).
- *1279. Marinula filholi (Hutton 1878) (9). *1281. Marinula striata Odhner 1924 (1). *1282. Leuconopsis obsoleta (Hutton 1878) (15). *1285.
- Siphonaria australis (Q. & G. 1833) (1). Siphonaria zelandica Q. & G. 1833 (1, 14). *1286. Siphonaria cookiana Suter 1909 (14). Benhamina obliquata (Sowerby 1825) (1, 14). *1287. *1288.
- *1290.1. Kerguelenia stewartiana Powell n. sp. (14, 30T). *1292. Gadinia nivea Hutton 1878 (9).
- *1316. Phelussa fulminata (Hutton 1883) (L-9, L-12T). Thalassohelix obnubila (Reeve 1852) (L-4, L-11). *1321. Allodiscus? stewartensis David 1934* 1344. *1345.
- Thermia cressida (Hutton 1883) (L-2, L-8, L-12). *1351. Therasia thaisa Hutton 1883 (L-10, L-12).
- Therasia antipoda chathamensis Suter 1909 (L-9, L-12). Phenacohelix pilula (Reeve 1852) (L-11). *1352. 1366. *1381. Flammulina perdita (Hutton 1883) (L-1, L-4, L-8).
- Flammulina feredayi (Suter 1891) (L-11). 1377. Charopa anguicula (Reeve 1852) (L-4). *1406. 1409.
- Charopa bianca (Hutton 1883) (L-11).

 Fectola (Subfectola) rakiura Powell n. sp. (L-6T).

 Fectola reeftonensis (Suter 1892) (L-6, L-11).

 Fectola roseveari (Suter 1896) (L-3, L-4, L-6). *1426.1.
- *1433. *1434.
- Fectola tapirina (Hutton 1883) (L-11). 1437. Phrixgnathus celia (Hutton 1883) (L-2, L-7, L-11). Phrixgnathus lirulata (Suter 1909) (L-2, L-4, L-8, L-12T). *1475.
- *1485. Phrixgnathus phrynia Hutton 1883 var major Suter 1897 (L-11T). *1489.
- Paralaoma lateumbilicata (Suter 1890) (L-4). *1501. Rhytida australis Hutton 1883 (L-12T). *1509. Onchidella campbelli Filhol 1880 (6). *1559.

AMPHINEURA.

- Ischnochiton maorianus Iredale 1914 (3). *1565. Ischnochiton circumvallatus (Reeve 1847) (3, 5). Ischnochiton luteoroseus Suter 1907 (19). Terenochiton inquinatus (Reeve 1847) (27). *1566. 1568.
- 1569. Terenochiton finlayi (Ashby 1929) (D-2). Icoplax cf. punicea (Gould 1846) (D-11). *1570. 1575. Icoplax empleura (Hutton 1872) (D-16T). 1577.
- Icoplax subcudoxa Iredale & Hull 1930 (F-6T). 1579.
- *1583. *1584.
- Eudoxochiton nobilis (Gray 1843) (3).
 Eudoxochiton huttoni Pilsbry 1893 (4).
 Cryptoconchus porosus Burrow 1815 (3, 14).
 Acanthochiton zelandilus amplificatus (187). *1586. *1589.
- Notoplax mariae (Webster 1908) (19) *1593.
- Craspedochiton rubiginosus (Hutton 1872) (F-4). *1600.
- Maorichiton caelatus (Reeve 1847) (10). *1602. Frembleya cgregia H. Adams (3).
- *1608. Rhyssoplax canaliculata (Q. & G. 1835) (F-4). *1615.

*1617. Amaurochiton glaucus (Gray 1828) (3).

Sypharochiton pelliserpentis (Q. & G. 1835) (3). Sypharochiton torri (Suter 1907) (3, 5). *1618.

*1620.

- *1621. Onithochiton neglectus Rochebrune 1881 (3).
- *1623. Onithochiton opiniosus Iredale & Hull 1932 (17).
- 1624. Onithochiton marmoratus Wissel 1904 (F-3).

SCAPHOPODA.

1626. Dentalium marwicki Mestayer 1926 (D-11).

*1630. Dentalium (Episiphon) arenarium (Suter 1907) (D-11T).

CEPHALOPODA.

1654. Polypus maorum (Hutton 1880) (19).

*David, von L. 1934. Senckenbergiana 16, n. 2-3 p.

LIST OF LOCALITIES.

STEWART ISLAND SHORE STATIONS-

Ringaringa Beach (Mrs. R. H. Harrison).

Horse Shoe Bay (shell-sand and beach drift. A.W.B.P., Nov., 1934).

Half Moon Bay (low-water. A.W.B.P., Nov., 1934). Leasks Bay, Half Moon Bay. (Mrs. R. H. Harrison.) 4.

Thule, Paterson Inlet (intertidal rocks, A.W.B.P., Nov., 1934).
Ocean Beach (low-water, under stones. A.W.B.P., Nov., 1934).
Ocean Beach (seaweed washings. A.W.B.P., Nov., 1934).
Ocean Beach (shell-sand. A.W.B.P., Nov., 1934).
Native Island (shell-sand and beach drift. A.W.B.P., Nov., 1934). 5. 6.

8.

9.

10. Golden Bay (low-water. A.W.B.P., Nov., 1934).

The Old Neck (shell-sand and beach drift. A.W.B.P., Nov., 1934). 11.

12. Paterson Inlet (Mrs. R. H. Harrison).

13.

North Arm, Paterson Inlet (low-water. A.W.B.P., Nov., 1934). Mason Bay (low-water under stones. A.W.B.P., Nov., 1934). Mason Bay (shell-sand and beach drift. A.W.B.P., Nov., 1934). Mason Bay (seaweed washings. A.W.B.P., Nov., 1934). Port Pegasus (under Durvillea hold-fasts. Mrs. R. H. Harrison). 14. 15.

16.

17.

Stewart Island (Hutton). 18.

19. Stewart Island (Suter 1913).

20. Stewart Island (Finlay).

- 21. Stewart Island (Traill coll.). 22.
- 23.

24.

Stewart Island (C. R. Laws 1937).
Glory Harbour (A. Hamilton coll.).
Harold's Bay (A. Hamilton coll.).
Cook's Arm, Port Pegasus (Mrs. R. H. Harrison).
Rosa Island, Port Pegasus (Mrs. R. H. Harrison). 25. 26.

27. Stewart Island (Odhner 1924).

28. Stewart Island (collected by residents).

Ulva Island, Paterson Inlet (A.W.B.P., Nov., 1934). 29. Aker's Point (Mrs. R. H. Harrison, Nov., 1934).

STEWART ISLAND LAND MOLLUSCAN STATIONS-

L 1.

Half Moon Bay (Mrs. R. H. Harrison). Ulva Island, Paterson Inlet (A.W.B.P., Nov., 1934). North Arm, Paterson Inlet (A.W.B.P., Nov., 1934). L 2. L 3.

L 4. L 5.

Lee Bay (A.W.B.P., Nov., 1934).
Near Ocean Beach (A.W.B.P., Nov., 1934).
The Neck, Paterson Inlet (A.W.B.P., Nov., 1934).
Observation Rock, Oban (A.W.B.P., Nov., 1934).
Near Mason Bay (A.W.B.P., Nov., 1934).
Native Island (Subrecent in dunce) (A.W.P.P. Nov., 1934). L 6. L 7.

L 8.

Native Island (Subrecent in dunes) (A.W.B.P., Nov., 1934). L 9. Mason Bay (Subrecent in dunes) (A.W.B.P., Nov., 1934). L10.

L11.

L12. L13.

Half Moon Bay (Suter 1913). Stewart Island (Suter 1913). Rakiahua River (A.W.B.P., Nov., 1934). Fresh Water River (Mrs. R. H. Harrison 1939), L14.

STEWART ISLAND DREDGE STATIONS-

Off Dynamite Point, Paterson Inlet, 13 fathoms (A.W.B.P., Nov., 1934). Off The Old Neck, Paterson Inlet, 13 fathoms (A.W.B.P., Nov., 1934). Mill Bay, Kaipipi Arm, 8 fathoms (A.W.B.P., Nov., 1934). D 2.

D 3.

D 4. Paterson Inlet, 13 fathoms (A. Hamilton coll.).

D 5. Off Fancy Group, 10-17 fathoms (Captain G. M. Turner).

D 6. 50-54 fathoms, Wreck Reef (Suter 1913). D 7. 50 fathoms, Wreck Reef (A. Hamilton coll.). Oyster Cove (dredged) (Mrs. R. H. Harrison). D 8. D 9.

Off Half Moon Bay (stomachs of blue cod). Off Half Moon Bay (dredged) (Mrs. R. H. Harrison). D10.

D11.

Port Pegasus, 18 fathoms (Suter 1913). Port Pegasus, 30 fathoms (A. Hamilton coll.). D12.

Port Pegasus, 12 fathoms (Suter 1913). D13.

D14. Port Pegasus (stomach of blue cod) (Suter 1913).

D15. Stewart Island, 13 fathoms (Suter 1913).

D16.

D17.

Stewart Island, 15 fathoms (Hutton) (Suter). Stewart Island, 24 fathoms (Hutton). Stewart Island, 25 fathoms (A. Hamilton coll.). Stewart Island, 30 fathoms (Hutton & Suter). D18. D19.

D20. Stewart Island, 35 fathoms (Suter).

D21. Stewart Island (dredged) (A. Hamilton coll.).

D22. Stewart Island, 15 fathoms (A. Hamilton, Suter coll.).

FOVEAUX STRAIT DREDGE STATIONS-

Foveaux Strait (A. Hamilton coll.).

- F 2. F 3. Foveaux Strait, 15 fathoms (A. Hamilton coll.). Foveaux Strait, 18 fathoms (A. Hamilton coll.).
- F 4.
- Foveaux Strait (oyster-dredge) (A. Hamilton coll.). Foveaux Strait, Ruapuke Oyster Bed (A. Hamilton coll.). Foveaux Strait (Ashby 1929). F 5.

F 6.

F 7. Foveaux Strait (Finlay). F 8. Foveaux Strait (Hutton).

F 9. Foveaux Strait (Suter 1913).

F10.

Foveaux Strait, 17 fathoms (Dr. H. J. Finlay coll.). Foveaux Strait (Bluff oyster scrapings) (Dr. H. J. Finlay coll.). Foveaux Strait, 20 fathoms (Finlay). F11.

F12.

REJECTED STEWART ISLAND AND FOVEAUX STRAIT RECORDS.

Arca reticulata Suter 1913 (non Gmelin 1790) = Acar sandersonae Powell 1933. Bittium cylindricum Suter 1913 (non Watson 1881). Australian. Rejected by Finlay (1926. Trans. N.Z. Inst., p. 381).

Cantharidus picturatus Suter 1913 (non H. & A. Ad.) Australian. Rejected by Finlay (1926, Trans. N.Z. Inst., p. 356).

Cocculina tasmanica Suter 1913 (non Pilsbry 1895) is Notocrater craticulata (Suter).

Cytherea subsulcata Suter 1913 (non Suter 1905). Rejected by Finlay (1926, Trans. N.Z. Inst., p. 470).

Dentalium nanum Suter 1913 (non Hutton 1873) is D marwicki Mestayer 1926. Euthria linea traversi Suter 1913 (non Hutton 1873) is Buccinulum marwicki (Finlay 1928).

Fissurella huttoni Suter 1906. Based upon the West Indian Diodora barbadensis (Gmelin). Rejected by Finlay (1926, Trans. N.Z. Inst., p. 342).

Fulguraria arabica Suter 1913 (non Martyn 1784) is Alcithoe swainsoni Marwick 1926.

Helcioniscus mestayerae Suter 1906. Based upon the East Indian and Melanesian Cellana testudinaria Linn. Rejected by Iredale (1915, Trans. N.Z. Inst., p. 432).

Myadora brevis, crassa and pandoriformis all of Suter 1913 (non Sowerby 1829, Stutchbury 1835). Rejected by Finlay (Trans. N.Z. Inst., p. 474).

Pecten aviculoides Suter 1913 (non E. A. Smith 1885). Juvenile of Pallium convexus (Q. & G.) Finlay (1926, Trans. N.Z. Inst., p. 452).

Photinula antipoda rosea Hutton 1873. Synonym of Subantarctic Margarella antipoda H. & J. Finlay (1926, Trans. N.Z. Inst., p. 357).

Pseudoliotia imperforata Suter 1908. Juvenile Modelia granosa (Martyn) Finlay (1926, Trans. N.Z. Inst., p. 365).

Schismope beddomei Suter 1913 (non Petterd 1884). Tasmanian species. N.Z. Shell S. laqueus Finlay (1926, Trans. N.Z. Inst., p. 340).

Subemarginula rugosa Suter 1913 (non Q. & G. 1834). Australian species. Foveaux Strait shell possibly Montfortula lyallensis Mestayer 1928. (No examples seen.) examples seen.)

Talopena sublaevis Finlay 1924 (a worn juvenile of Cantharidella tesselata (A. Adams 1851).

Trophon bonneti Suter 1913 (non Cossmann 1903) is Axymene pumila (Suter 1899).

Trophon corticatus Suter 1913 (non Hutton 1873) is Euthrenopsis otagoensis Powell 1929).

Trochus chathamensis Hutton 1873. Foveaux Strait shells are Thoristella chathamensis benthicola Finlay 1926.

PELECYPODA. NUCULIDAE.

Genus Austronucula n. gen.

Type: A. schencki n. sp.

Schenck in his "Classification of Nuculid Pelecypods" (1934, Bull. Mus. Royal d'Hist. nat. de Belgique p. 18) divides the nuculids into three taxonomic units: (A) those having shells with denticulate ventral margins; (B) those having smooth inner ventral margins; (C) those with divaricate sculpture.

A new species from several Stewart Island localities conforms in hinge details with Pronucula Hedley, which belongs to unit (A) but differs in having a smooth ventral margin as in unit (B) and also in having a more conspicuously marked off prodissoconch which is flat and oval. A closely allied species appears to be the South Australian micans Angas 1878 and possibly flindersi Cotton 1930. The surface is smooth or with weak concentric sculpture.

The previously described New Zealand species—Pronucula mesembrina Hedley 1916, tenuis Powell 1927 and maoria Powell 1937—each have the characteristic radials and denticulate ventral margin of Pronucula s. str.

By accepting the presence or absence of valve crenulations as being of taxonomic import in the family it becomes necessary also to segregate the smooth margined strangei A. Ad. from the remaining New Zealand species classed under Nucula s. str. A name is available in Ennucula Iredale 1931, type Nucula obliqua Lamarck, Southern Australia.

Austronucula schencki n. sp. Pl. 48, fig. 5.

Shell minute, smooth, light olive-brown, obliquely triangularly ovate, inflated. No sculpture, either radial or concentric. Valve margins smooth. Umbones prominent, prodissoconch oval,

flattened on top and defined by a slight rim. Hinge strong, closely similar to that of *Pronucula*. Teeth few, large, squarish, distant from the large almost perpendicular chondrophore. In the right valve there are four strong anterior teeth and two weak ones posterior to the chondrophore. In the left valve there are four strong anterior, and one weak posterior tooth. The posterior subdorsal margin of the right valve fits into a well marked corresponding groove in the left.

Length, 1.15 mm.; height, 1 mm.; thickness (2 valves), 0.61 mm.

Holotype: In Auckland Museum.

Localities: Rosa Island, Port Pegasus, Stewart Island (shell-sand, Mrs. R. H. Harrison); Mason's Bay, Stewart Island (shell-sand).

PERRIERINIDAE.

Genus Legrandina Tate & May 1901.

Type (orig. desig.): L. bernardi Tate & May.

Legrandina turneri n. sp. Pl. 48, fig. 7.

Shell very small, moderately convex, thin but not fragile, sub-ovate, beaks about central, flattened, the broadly rounded prodissoconch defined by a faint rim. Externally the shell is smooth, except for concentric growth lines, but internally the ventral margin shows faint crowded crenulations. When subjected to strong transmitted light crowded radials are seen to occupy the whole shell, but do not show either on the outer or inner surfaces. Hinge rather massive but comparatively short. Right valve with two cardinals, almost joined above, but strongly divergent below. There are five oblique lamellae on each side of the cardinal area. In the left valve there are two cardinals fused into one large triangular tooth, as well as the lamellae corresponding to those of the right valve. Adductor scars typical. Pallial line simple and entire. Colour pale buff, two thirds of the shell from the posterior end stained dark reddish-brown.

Length, 2.75 mm.; height, 2.4 mm.; thickness (one valve), 0.6 mm.

Holotype: In Auckland Museum.

Localities: Old Neck Beach, Paterson Inlet, Stewart Island. Coll. (A.W.B.P., Nov., 1934); Harrington Point Beach, Otago Harbour (Dr. C. R. Laws coll.).

This makes the third New Zealand Legrandina, the other two being aucklandica Powell 1933 from Faith Harbour, Auckland Islands, and harrisonae Powell 1935 from Mason's Bay, Stewart Island.

PECTINIDAE.

Genus Chlamys Bolten 1798.

Chlamys campbellicus Odhner 1924. Pl. 50, figs. 10-14.

1924. Chlamys campbellicus Odhner. Pap. Dr. Mort. Pac. Expd. 1914-1916. pt. 19, N.Z. Mollusca, p. 61, pl. 2, figs. 36-39. Type. Perseverance Harbour, in 20 fathoms, Campbell Island.

Dimensions: Height, 32 mm.; breadth, 29 mm.

Four specimens which I ascribe to this species were collected on Mason Bay Beach, West Coast of Stewart Island, by Mrs. R. H. Harrison. Similar specimens occur in 40-50 fathoms off Cape Saunders, Otago, including occasional much larger specimens up to 68 mm. in height (Dr. C. R. Laws collection). Further occurrences are: 55 fathoms, 31 miles S. from Wellington and 25 miles E. from Cape Campbell (Dr. P. Marshall), the largest example being 70 mm. in height; and 50 fathoms off the southern end of Macquarie Island, the largest being 69 mm. in height.

It seems likely that the Recent specimen of unknown locality in the Dominion Museum collection, recorded as *delicatulus* by Thomson (1919, Trans. N.Z. Inst., vol. 51, p. 480) belongs here

also.

Certainly these larger examples of campbellicus closely resemble the fossil delicatulus Hutton, type from Mid-Pliocene (Nukumaruan) beds at Castle Point, N.Z., but there are constant differences in sculpture between the two, nevertheless.

The profile of the ribs in both valves is lower in *delicatulus* and the interstitial radials become spinose only at a comparatively

mature stage of growth.

In the left valve there is but a single interstitial radial in delicatulus except, towards the margin in large specimens, whereas in campbellicus three to five spinose radials occupy the interspaces commencing at a very early stage. Delicatulus exhibits a single interstial riblet up to 35 mm. in height, whereas three riblets frequently appear at 15 mm. in campbellicus. The largest delicatulus I have measures 94 mm. x 94 mm.; also the species is less convex than the Recent campbellicus. The right valve is very similar in both species.

There is little doubt that campbellicus is the direct Recent descendant of the Pliocene delicatulus.

Dimensions of campbellicus:—

Height, 32 mm.; breadth, 29 mm. (holotype).

Height, 30 mm.; breadth, 27.5 mm.; Mason Bay, Stewart Island.

Height, 27 mm.; breadth, 25.25 mm.; Mason Bay, Stewart Island.

Height, 68 mm.; breadth, 67 mm.; 40-50 fathoms, Cape Saunders.

Height, 69 mm.; breadth, 68 mm.; Macquarie Island.

Height, 70 mm.; breadth, 69.5 mm.; 55 fathoms, Cape Campbell.

GAIMARDIIDAE.

Genus Kidderia Dall 1876.

Type: Kidderia minuta Dall.

Kidderia rakiura n. sp. Pl. 48, fig. 1.

Shell of moderate size, thin, white, transversely elongate, inflated, very inequilateral, the beaks almost anterior. Rostrum short, narrowly rounded, but not angulate. Sculpture of distinct but fine crowded concentric growth lines. Beaks bluntly rounded. Ventral margin straight to slightly concave at the anterior end, where it rises to the rostrum. Hinge teeth small, sometimes obsolete; right valve with two oblique small cardinals, left valve with one. There is a short oblique internal resilium and a comparatively short submarginal ligament.

Length, 6.75 mm.; height, 4.3 mm. (holoytpe).

Length, 8.4 mm.; height, 4.9 mm.; thickness (2 valves), 4.5 mm. (paratype).

Holotype: Presented to Auckland Museum.

Locality: Ringaringa Beach (cast ashore after storm), Stewart Island (Mrs. R. H. Harrison).

The species is nearest allied to the Snares Island acrobeles (Suter 1913), being of similar outline, but it is considerably larger, has more pronounced concentric growth striae, no trace of radial folds, a weaker hinge and a shorter ligament.

CONDYLOCARDIDAE.

Genus Benthocardiella Powell 1930.

Type (orig. desig.): B. pusilla Powell.

Benthocardiella rakiura n. sp. Pl. 48, fig. 6.

Shell minute, thin, semi-transparent, white, moderately convex, obliquely oval, anterior end produced. Surface glossy, but crowded with fine concentric striations. Valve margins smooth. Prodissoconch moderately large, circular, with a rounded margin and a prominent boss in the middle. Hinge typical, except that it lacks the hooked process on the posterior cardinal of the left valve. Left valve with three cardinals, a long prominent anterior one and a pair of short posterior teeth, the uppermost the larger, confluent with the valve margin and terminating at the chondrophore in a slight swelling. Right valve with three cardinals, a long slender anterior one near to the valve margin, a shorter and much heavier one beneath, and a single short anterior tooth. In this genus modifications in respect to position, shape and strength of the hinge teeth are brought about by the relative obliquity of the shell shape.

Length, 1.15 mm.; height, 1.2 mm.

Holotype: In Auckland Museum.

Locality: Old Neck Beach, Paterson Inlet, Stewart Island, in beach drift (A.W.B.P., Nov., 1934).

The species resembles a *Pachykellya* in shape except for the prodissoconch.

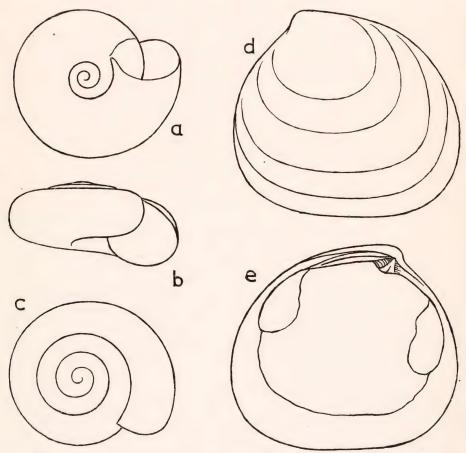
UNGULINIDAE.

Genus Zemysia Finlay 1926.

Type (orig. desig.): Lucina zelandica Gray.

Zemysia rakiura n. sp. Text figures d. and e.

This species is close to *zelandica*, but can be separated at all growth stages by the position of the beaks, which are at the anterior third (in *zelandica* they are almost central), by the somewhat oblique-oval outline, the dorsal and the ventral margins being flattened for more than half the diameter of the shell, and



a, b, c. Fectola (Subfectola) rakiura Powell n. sp. Holotype (1.65 x 0.8 mm.). d, e. Zemysia rakiura Powell n. sp. Holotype (10.5 x 9,2 mm.),

subparallel, by the smoother surface and slightly greater convexity. The only difference in the hinge is that the bifid cardinal of the right valve is more broadly triangular.

Superficially the species has a striking resemblance to *Marikellia rotunda* (= *Kellya suborbicularis*), and it is constantly of

much smaller size.

Length, 10.5 mm.; height, 9.2 mm.; thickness (one valve), 2.75 mm. (holotype).

Length, 10.1 mm.; height, 9.4 mm.; thickness, 2.25 mm. (juvenile zelandica).

Holotype: In Auckland Museum.

Locality: Ringaringa Beach, Stewart Island (Mrs. R. H. Harrison).

ERYCINIDAE.

Genus Puyseguria* Powell 1927.

Type (orig. desig.): P. cuneata Powell 1927.

Puyseguria tani n. sp. Pl. 48, fig. 2.

Shell minute, equivalve, obliquely sub-ovate. Beaks bluntly rounded, small. Prodissoconch not plainly marked off. Surface smooth apart from faint concentric growth lines. Valve margins thin, smooth. Hinge-plate strong, interrupted in the middle by an oblique internal resilium. Right valve with a strong anterior elongated lateral bent over as a thin lamella at the proximal end, leaving a triangular cavity beneath; posterior lateral smaller, long and narrow.

Left valve a strong medially grooved (hardly bifid) triangular cardinal and a weak elongated anterior and posterior lateral.

Colour reddish-brown, darkest at umbo, lightest at ventral

margin.

Length, 1.3 mm.; height, 1.2 mm.; thickness (one valve), 0.3 mm.

Holotype: In Auckland Museum.

Locality: Old Neck Beach, Paterson Inlet, Stewart Island. Coll. (A.W.B.P., Nov., 1934).

The species is nearest allied to prognata Powell 1927, from 170 fathoms, off Puysegur Point, differing in being less inflated, less oblique, having a smaller prodissoconch and in the brown coloration.

Named after Captain G. M. Turner's dog Tan.

^{*}Corrected spelling of genus which appeared as Puysegeria,

Genus Rochefortula Finlay 1926.

Type (orig. desig.): Rochefortia reniformis Suter.

Rochefortula decapitata n. sp. Pl. 48, fig. 4.

Shell small, quadrate-oval, inequilateral, beaks broad and flattened, situated at about the posterior third. Surface apparently smooth, but really sculptured with dense, microscopic radial striae; there is no true concentric sculpture, only moderately wide spaced growth lines. Hinge plate narrow, restricted by the flattened beaks. Right valve with two divergent strong cardinals, left valve with two lamellate weaker teeth.

Length, 2.8 mm.; height, 1.95 mm.

Holotype: In Auckland Museum.

Localities: Rosa Island, Port Pegasus, Stewart Island (in shell sand), Mrs. R. H. Harrison) (Type); Waitangi, Chatham Islands; Faith Harbour, Auckland Islands; Snares Islands, 50 fathoms.

At first sight the species may be taken for juvenile reniformis, but that species at all stages of growth has very small projecting beaks, stronger radial striae and distinct concentric ridges. The new species apparently never reaches the size of adult reniformis.

Rochefortula taieriensis n. sp. Pl. 48, fig. 3.

Shell small, ovate, beaks small but bluntly rounded, situated a little posterior to the centre. Dorsal margin descending rather steeply from the beak, anterior, posterior and ventral margins broadly rounded. Surface smooth except for exceedingly fine and dense radial striae. There is no true concentric sculpture, only distant growth lines. Hinge of right valve with two short, stout, divergent cardinals, that of left valve with two lamellae thickened slightly at their proximal ends.

Length, 2.6 mm.; height, 2.2 mm.

Holotype: In Dr. H. J. Finlay Collection, Auckland Museum.

Locality: Taieri Beach, Otago, in shell sand.

From *decapitata* the new species differs in being much less elongate and in having the dorsal slopes descending more steeply and the beaks considerably smaller.

Another species of this group is my Mysella bidentifera (Powell 1933) from Tom Bowling Bay.

True reniformis occurs throughout New Zealand and at the Chathams.

GASTEROPODA. FISSURELLIDAE.

Genus Tugali Gray 1843.

Type: Tugali elegans Gray.

Tugali stewartiana n. sp. Pl. 50, figs. 7, 8 and 9.

Only one *Tugali* seems to occur at Stewart Island, and it is quite distinct from the four known Recent forms.

It is more coarsely sculptured than any other New Zealand species, the radials being dominant and regularly alternating in strength. The concentric ridges also are fewer and stronger than in elegans. The early sculpture is openly netted as in bascauda, but the sinus rib upon breaking up becomes triple, as in elegans and colvillensis. In shape the new species is elongate oval, less tapered than elegans, yet not so bluntly rounded as either bascauda or suteri. The convexity of the shell approximates that of elegans. The holotype has twelve strong radials and eleven considerably weaker intermediates on the short posterior slope from the apex back to the margin. The marginal crenulations are slightly irregular, due to the alternation in strength of the radials.

Length, 20.5 mm.; breadth, 12.5 mm.; height, 6.25 mm. (paratype).

Length, 21.75 mm.; breadth, 13.5 mm.; height, 7.25 mm. (holotype).

Length, 27.5 mm.; breadth, 18.25 mm.; height, 10 mm. (paratype).

Holotype: In author's collection, Auckland Museum.

Localities: Ringaringa (type) and Horse Shoe Bay, Stewart Island (Mrs. R. H. Harrison).

STOMATELLIDAE.

Genus Margarella Thiele 1893.

Type (orig. desig.): Margarita violacea King.

Margarella turneri n. sp. Pl. 49, fig. 12.

This species differs from the variably coloured *decepta* in its constant pattern of wide spaced zigzag, axial, purplish-brown bands, turbinate shape, and smaller, more circular aperture. The ground colour is pale cream, with a trace of greenish irridescence, two bright pink spiral lines on the spire whorls, and occasionally one or two similar lines on the base. In adult specimens the pink lines are absent from the body-whorl and the penultimate, above the periphery. There are eleven (variation in paratypes 9-11) zigzag bands on the body-whorl. When axial colour markings augment the spiral or zoned pattern in *decepta* they are invariably

more numerous, narrower, closer spaced and more diffused as a network. Surface smooth and polished except for a few sub-obsolete basal spirals. Imperforate but with a shallow crescentic depression bordering the columellar callus, which is white. Interior highly irridescent, with the zigzag pattern showing through. Whorls 5.

Height, 7.75 mm.; diameter, 8 mm. (Holotype). Height, 8 mm.; diameter, 8.25 mm. (Paratype). Height, 8.5 mm.; diameter, 8.75 mm. (Paratype). Height, 8 mm.; diameter, 9 mm. decepta (Kakanui). Height, 7.5 mm.; diameter, 8.5 mm. decepta (Kakanui). Height, 9 mm.; diameter, 10.5 mm. decepta (Kakanui).

Holotype and paratypes: In Auckland Museum.

Locality: Island of Ulva, Paterson Inlet (Type) and Ringaringa, Stewart Island. Always on seaweed covered rocks at low tide, never under the holdfasts of D'Urvillea, where decepta is found exclusively.

Margarella puysegurensis n. sp. Pl. 49, fig. 13.

This species is closely allied to turneri, but has a more variable pattern. Broad pink spiral bands, or with wide zigzag dark purplish to greenish brown axial bands, so merged that the shell appears uniformly dark, except for a row of ovoid light patches at the periphery, and others towards the termination of the body whorl, are the extremes in pattern in the series. holotype has the diffused dark purplish to greenish brown pattern with a few ovoid light patches near the outer lip and five moderately broad pink spiral bands beneath, two on the upper part of the whorls, one at the periphery and two on the base. These bands show as pink, only where they coincide with an occasional light patch, otherwise they appear as dark red brown under the prevailing dark purplish to greenish-brown. Columella and broad crescentic area surrounding it creamy-buff. There is a slight umbilical cleft above a crescentic depression bordering the columella. Shell turbinate, slightly more depressed than turneri, but otherwise closer to that species with its small rounded aperture, than to either *decepta* or the subantarctic *antipoda*. Whorls 4. Smooth and polished except for a few subobsolete basa! spirals. Constantly smaller than turneri, but evidently adult, judging from the columellar callus.

Height, 5 mm.; diameter, 5.5 mm. (Holotype).

Height, 4.75 mm.; diameter, 5.75 mm. decepta (Kakanui).

Holotype and paratypes: In Auckland Museum.

Locality: Sealers' Beach, near Puysegur Point, S.W. Otago. Coll. A.W.B.F., Nov., 1934. On seaweed in rock pools near low water.

From turneri this species differs in being slightly more depressed, having an umbilical cleft, different colour pattern, and being constantly of smaller size.

CALLIOSTOMATIDAE.

Genus Maurea Oliver 1926.

Type (orig. desig.): Trochus tigris Martyn.

Subgenus Mucrinops Finlay 1926.

Type: Zizyphinus spectabilis A. Adams.

The Calliostomids of the punctulata series are a puzzling group. I have already (Powell 1926, p. 591) referred to a North Island form from muddy locations, which has numerous equally developed spiral granular ridges, instead of the normal arrangement of 7 primaries and 5 interstitial riblets. Later (1926), both Finlay and Oliver clashed in the description of a Stewart Island form, more squat than the typical species, and with 12 equideveloped spirals, as in the form from North Island mudflats. After collecting a large series from Stewart Island, another form appeared in extra large elevated shells, with from 9 to 12 equideveloped spirals. This same form also occurs along with typical punctulatum at Paekakariki, Wellington Province, and at the Chatham Islands.

As the two Stewart Island forms cannot be reconciled under the one subspecific name, I propose to separate the larger one as new.

The distribution of the punctulata series now appears as follows:—

- (1) punctulata punctulata: North Island (North Cape to Wellington).
- (2) punctulata urbanior: Stewart Island, Otago, Westport and ?Kawhia.
- (3) punctulata ampla: Stewart Island, Chatham Islands, Kaikoura and Paekakariki (North Island).

Maurea (Mucrinops) punctulata ampla n. subsp. Pl. 50, fig. 6.

Spire tall, conic, outlines lightly convex, one and a third times height of aperture. Upper spire whorls with 6 beaded spiral cords, and a plain thread in each interspace, antepenultimate with 9 beaded cords and two plain threads, one at upper suture and the other between cords 2 and 3, penultimate with 12 beaded cords, the additions being plain threads of the earlier whorl, plus one other which have become beaded.

Colour light orange brown with serial reddish brown dots

on the spiral cords between the beads.

Height, 43 mm.; diameter, 38.75 mm. (holotype).

Holotype: In Auckland Museum.

Locality: Mason's Bay, Stewart Island (holotype).

FOOTNOTE.—I note that Thiele 1931 Handbuch der Systematischen Weichtierkunde, p. 49, provided the new name *Calotropis* for *Calliotropis* Oliver, type *Trochus cunninghami* Gray (non *Calliotropis* Seguenza). However, the group hardly needs separation from *Maurea* s. str.

LIOTHDAE.

Genus Zalipais Iredale 1915.

Type (orig. desig.): Delphinoidea lissa Suter.

Zalipais turneri n. sp. Pl. 49, fig. 11.

Shell minute, depressed turbinate, thin, semi-transparent, smooth, umbilicated. Colour dull white. Suture deeply impressed. Protoconch of one smooth whorl, moderately large, as a convex blob. Whorls two, rapidly increasing, rounded, with a downward trend towards the aperture. The periphery is low at the level of the suture. Aperture subcircular, almost "D" shaped. Peristome continuous, sharp, straight across parietal wall. Outer lip advanced above, incurved and slightly notched at the suture. Spire about one-third height of aperture. Umbilicus deep, open, about one eighth the major diameter. Operculum horny, circular, concentric, nucleus central.

Height, 0.75 mm.; diameter, 1.05 mm. (holotype).

Holotype: In Auckland Museum.

Locality: Ocean Beach, Stewart Island (seaweed washings).

The species differs from *lissa* in being more turbinate in shape and in lacking the fine radial riblets. Finlay's parva (1924) is very much smaller and planorbid, while my benthicola (1927) has a wide open umbilicus.

LITTORINIDAE.

Genus Zelaxitas Finlay 1926.

Type (orig. desig.): Laevilitorina cystophora Finlay.

Zelaxitas rissoaformis n. sp. Pl. 49, fig. 5.

Shell small, thin, vitreus, smooth, Rissoa-like, with tall spire, one and a third times height of aperture. Whorls $4\frac{1}{2}$, moderately convex. Sutures rather deeply impressed. Peristome thin and sharp, continued across parietal wall as a defined callus. Aperture ovate-pyriform. Operculum typical, ovate-pyriform, concentric with the nucleus median, near to the inner margin. Colour light brown, fading out on the lower part of the base.

Height, 2.55 mm.; diameter, 1.5 mm.

Holotype: In Auckland Museum.

Locality: Ocean Beach, Stewart Island (on seaweeds at low tide, A.W.B.P., Nov., 1934).

RISSOIDAE.

Genus Subonoba Iredale 1915.

Type (orig. desig.): Rissoa fumata Suter.

Subonoba edita n. sp. Pl. 49, fig. 6.

Shell small dull white, thin, attenuate. Spire twice height of aperture. Whorls 6, lightly convex. Sculpture consisting of numerous fine and close spiral lirae, 10 on antepenultimate, 11 on penultimate, 12 on body whorl plus 7 on the base. Protoconch papillate of $1\frac{1}{2}$ smooth whorls. Peristome continuous, sharp. Aperture subovate.

Height, 3 mm.; diameter, 1.3 mm.

Holotype: In Auckland Museum.

Locality: Rosa Island, Port Pegasus, Stewart Island (in shell-sand. Mrs. R. H. Harrison).

The species is close to fumata Suter, but is constantly larger, yet relatively more slender.

Genus Merelina Iredale 1915.

Type (orig. desig.): Rissoa cheilostoma Ten.-Woods.

Two of the species here described occur at Stewart Island, but the third is a northern species, the description of which is included herein for convenience.

Merelina harrisonae n. sp. Pl. 49, fig. 2.

Shell large for the genus, solid, clathrate, spirals more prominent than the axials. Related to *lyalliana*, but larger, with fewer and weaker axials, keels more prominent and equal in development, and colour uniformly buff, without colour bands. The axials are fold-like, so that they have the effect of producing the spiral keels into laterally compressed nodules at the points of intersection, without being noticeable in the interspaces of the keels, thus not enclosing distinct rectangular spaces. Spire whorls with two strong keels, body whorl with two, plus a prominent smooth sutural keel, and two others on the base.

Height, 3.4 mm.; diameter, 1.55 mm.

Holotype: In Auckland Museum Collection.

Locality: Ringaringa (type) and Mason Bay, Stewart Island. Coll. Mrs. R. H. Harrison.

Merelina maoriana n. sp. Pl. 49, fig. 1.

1873. Rissoa plicata Hutton (non Deshayes 1838) Cat. Mar. Moll. N.Z., p. 29.

This is the Forsterian, Cookian, and Moriorian representative of the Rossian plaga Finlay 1926. It differs from that species in slightly smaller size, finer sculpture, and the addition of a third spiral keel on the body-whorl; this, the uppermost spiral, is weakest.

The axials are more closely spaced (16 on the body whorl as against 12 in plaga), the enclosed interspaces being square instead of slightly oblong.

The sculpture is crisp, but not strong, and is not rendered gemmate at the points of intersection of the spirals and axials.

Colour uniformly dull white, without colour bands.

Height, 3 mm.; diameter, 1.3 mm.

Holotype: In Dr. H. J. Finlay Collection, Auckland Museum.

Localities: Dunedin Harbour, 3 fathoms (type); Cuvier Island, 38 fathoms; Mason Bay, Stewart Island; off Cape Saunders, 40-50 fathoms; Waitangi, Chatham Islands.

Merelina taupoensis n. sp. Pl. 49, fig. 3.

Shell small, solid, clathrate. Protoconch typical (13 whorls sculptured, with about 12 spiral striae). Whorls 6. Suture narrowly margined above and below. Spire whorls with three equispaced spiral keels (median strongest, lowest almost as strong, uppermost weak), gemmate at points of intersection with axials. Body whorl with addition of a fourth smooth sutural keel and three more on base. Labial varix rather weak. with a faint brown band below suture and between third and sixth spirals on base. Related to M. superba Powell 1927.

Height, 2.8 mm.; diameter, 1.2 mm.

Holotype: In Dr. H. J. Finlay Collection, Auckland Museum.

Localities: Taupo Bay, Whangaroa (type); St. Helier's Bay, and Motutapu Island, Auckland; Doubtless Bay, 12 fathoms; Tom Bowling Bay.

KEY TO N.Z. SPECIES OF MERELINA.

MERELINA. Protoconch of smooth spirals—base spirally sculptured. A. Protoconch with 3 spiral lirae.

- (a) Body whorl spirals all one series, continued over base.
 1. gemmata. Whorls 5½ clathrate (gemmate). Spire whorls 3 keels. Body whorl 6 keels (3 basal).
- B. Protoconch with more than 3 spiral lirae.
 - 2. compacta. Whorls 4 clathrate (gemmate). Spire whorls 2 keels. Body whorl 6 keels (4 basal).
 - (b) Body whorl spirals in two series (body-whorl and basal).

(aa) Sculpture crisp, not gemmate, at axial and spiral intersection.

- 3. plaga. Whorls $5\frac{1}{2}$ clathrate (spirals and axials equal). Spire whorls 2 keels. Body whorl 2 keels + 3 basal.
- 4. maoriana. Whorls $5\frac{1}{2}$ clathrate (spirals and axials equal). Spire

whorls 2 keels. Body whorl 3 keels (uppermost weak) + 3 basal.

5. manawatawhia. Whorls 5½ clathrate (axials slightly stronger). Spire whorls 3 keels. Body whorl 3 keels + 4 basal.

6. paupereques. Whorls $4\frac{3}{4}$ clathrate (equal). Spire whorls 2 keels. Body whorl 2 keels + 2 basal keels + 2 weak threads.

(bb) Sculpture gemmate at axial and spiral intersection.
 7. lyalliana. Whorls 5½ clathrate (spirals more prominent). Spire whorls 2 keels (upper more prominent). Body whorl 2 keels + 3

8. harrisonae. Whorls $6\frac{1}{2}$ clathrate (spirals more prominent). Spire whorls 2 keels (equal). Body whorl 2 keels + 3 basal.

9. taupoensis. Whorls 6 clathrate (equal). Spire whorls 3 keels (No. 2 strongest, 3 next, 1 weakest). Body whorl 3 keels + 4 basal.

10. superba. Whorls $6\frac{1}{2}$ clathrate (equal). Spire whorls 3-4 keels. Body

whorl 4 keels + 3 basal.

11. waitangiensis. Whorls $6\frac{1}{2}$ clathrate (spirals more prominent). Spire whorls 4-5 keels. Body whorl 5 keels + 4 basal.

(cc) Sculpture with axials dominant. 12. cochleata. Whorls 5. Spire whorls 2 threads. Body whorl 2 threads + 3 basal keels.

13. crispulata. Whorls 5. Spire whorls 3 threads. Body whorl 4 threads + 3 basal keels.

(dd) Sculpture extra heavy.

14. crassissima. Whorls 4, clathrate (equal). Spire whorls 2 keels. Body whorl 3 keels + 3 basal.

LOCALITY RANGE OF SPECIES.

Merelina gemmata Powell 1927-Maro Tiri, Chicken Is. (type); Tom Bowling Вау.

compacta Powell 1927-Mangonui 6-10 fath. (type); Tryphena, Great Barrier Island, 6 fath.; Tom Bowling Bay.

plaga Finlay 1926—Snares Is. 50 fath. (type); Faith Harbour, Auckland

Is., off Auckland Is. 95 fath.; Bounty Is. 50 fath. maoriana Powell n. sp.—Dunedin Harbour 3 fath. (type); Cuvier Id. 38 fath.; Mason Bay, Stewart Id.; off Cape Saunders 40-50 fath. Dusky Sound 30 fath.

manawatawhia Powell 1937—Off Three Kings Is. 260 metres (type). paupereques Powell 1937—Off Three Kings Is. 260 metres (type); off Poor Knights Is. 60 fath.

lyalliana (Suter 1898)—Lyall Bay (type); Whangaroa; Tom Bowling

harrisonae Powell n. sp.—Ringaringa, Stewart Id. (type); Mason Bay,

Stewart Id.

taupoensis Powell n. sp.—Taupo Bay, Whangaroa (type); St. Helier's Bay, Auckland; Motutapu Id., Auckland; Doubtless Bay, 12 fath.; Tom Bowling Bay.

superba Powell 1927—Maro Tiri, Chicken Is. (type); Tryphena, Great Barrier Id. 6 fath.; Tom Bowling Bay; Foveaux Strait

(oyster dredge); Open Bay Is., Westland.
waitangiensis Powell 1933—Waitangi, Chatham Is. (type).
cochleata Powell 1937—Off Three Kings Is. 260 metres (type).
crispulata Powell 1937—Off Three Kings Is. 260 metres (type).
crassissima Powell 1937—Off Three Kings Is. 92 metres (type).

Genus Scrobs Watson 1886.

Type: Rissoa (Scrobs) badia Watson = Rissoia jacksoni Brazier.

Scrobs trailli n. sp. Pl. 49, fig. 4.

Similar to S. ovata Powell 1927 in general shape, but much larger, and with more convex whorls. The details of the peristome differ noticeably in that there is an inner rim duplicated on the outside by a heavy callus that fills the usual parietal cleft, although it is still separated from the parietal wall by a narrow groove. The outer lip callus does not bridge across to the body

wall, as in *ovata* and in the *hedleyi* series generally, but is deeply incised instead. Whorls $3\frac{1}{2}$. Spire $1\frac{1}{2}$ times height of aperture. Protoconch typical, of $1\frac{1}{2}$ finely stippled globose whorls. Surface smooth. Colour dark reddish brown except the peristome and the base, which are white.

Height, 1.5 mm.; diameter, 0.8 mm.

Holotype: In author's collection, Auckland Museum.

Locality: Mason's Bay, Stewart Island (in shell-sand; one specimen).

Named after Mr. Roy Traill, of Stewart Island.

EULIMIDAE.

VENUSTILIFER n. gen.

Type: Hypermastus bountyensis Powell 1933.

In 1933 (Proc. Malac. Soc., vol. 20, pt. 5, p. 235) I described a then unique specimen from 170 fathoms, off the Bounty Islands, as *Hypermastus bountyensis*, noting that it was much more globular than the New South Wales genotype. The finding of further material at Mason's Beach, Stewart Island, shows that this globular shape is constant throughout all growth stages. In fact, the species is virtually a *Stilifer*, but with an elevated two-whorled parallel sided, blunt tipped, projecting protoconch set obliquely and partly immersed. *Hypermastus coxi* Pilsbry, the genotype, has a somewhat similar apex, but it is erect, and the adult shell is decidedly Eulimoid. I now have no hesitation in providing the above new generic name for the New Zealand species.

STRUTHIOLARIIDAE.

Genus Struthiolaria Lamarck.

Type (monotypy): S. nodulosa Lamk (= Buccinum papulosum Martyn).

Struthiolaria papulosa varies with locality, so that certainly two forms, and possibly a third, are recognisable. The differences are not great, but are such that Stewart Island and North Island shells are readily separable, the former being larger than northern examples, having the nodules almost suppressed, the spiral sulcations deeper, and the colour pattern of broader axial streaks. These differences are even more marked in juveniles. Specimens from the vicinity of Wellington are similar to Auckland examples except that the spiral sulcations are a trifle more pronounced and the colour pattern is so diffused that the shell appears almost uniformly reddish brown. Martyn's figure (1874 Universal Conchologist, f. 54) is just such a shell.

For the time being two forms should be recognised, papulosa (typical) North Island (Wellington here designated as type locality) and the Stewart Island form, which may bear the name Struthiolaria papulosa gigas Sowerby 1842. Thes. Conch. 1, Pl. 5, f. 17. (See Pl. 50, figs. 1-5.)

S. sulcata Jonas 1839 may have priority, but without seeing the type I cannot decide. It is evidently a freak specimen in which the nodules are entirely absent. I have seen such specimens both from Stewart Island and North Auckland.

PYRENIDAE.

Genus Aoteatilia n. gen.

Type: Daphnella substriata Suter 1899.

A new genus is necessary for the reception of four undoubtedly con-generic species that had previously been placed for want of better locations in the genera *Daphnella* and *Mitromorpha* respectively. I propose removing them from the *Turridae* to the *Pyrenidae* and placing them near to *Zemitrella*.

The new genus is characterised by having a $1\frac{1}{2}$ whorled papillate protoconch, smooth except for minute pitting; post nuclear sculpture in the form of close spiral lirae continued over the neck of the canal without differentiation, not with a heavier basal spiral series, as in most species of Zemitrella. The oblique plait (at the base of the pillar), so characteristic of Zemitrella, is well shown; also there is a very slight sinuosity on the shoulder of the outer lip, a factor that has been influential in the reference of the species to the Turridae. A similar weak sinus is found in some species of Zemitrella and Liratilia, notably Z. sulcata (Hutton) and Z. pseudomarginata (Suter).

Four species fall naturally into the new genus, and a fifth from Awanui, in 10 fathoms, awaits description.

The described species are *Daphnella substriata* Suter 1899, *D. acicula* Suter 1908, *D. psila* Suter 1908, and *D. tenuistriata* Suter 1908.

The protoconch in three of the species (I have not seen speci-

mens of psila) is tinged with pink to purple.

My Antimitrella (1937, p. 214) is another related genus differing mainly in nuclear sculpture, which is in the form of faint axial striations on an otherwise smooth and glossy surface; also the downward sagging whorls make laxa the genotype, not unlike Aoteatilia acicula in shape.

TURRIDAE.

Genus Maorimorpha n. gen.

Type: Mitromorpha suteri Murdoch 1905.

The above new genus is provided for a species described originally as a *Mitromorpha* by Murdoch (1905), removed to *Alcira* in the *Pyrenidae* by Suter (1913), and more recently referred back to the *Turridae* by Finlay (1926). The relationships of the genus are not obvious, but it is undoubtedly a Turrid, although there is superficial resemblance to the spirally lirate Pyrenids.

The generic characters are: Protoconch large, smooth, papillate, rather straight-sided, apex oblique but hardly lateral; post-nuclear sculpture of moderately strong spiral lirations continuous over all whorls and the neck of the canal; labial sinus sub-

sutural, broad, shallow, but distinct; canal short, broad and open, lip thin, not denticulate.

The genus so far as I know is monotypic.

The type of *suteri* is from Whangaroa Harbour, but the species occurs also at Stewart Island (dredged off Half Moon Bay) and Foveaux Strait (Bluff oyster scrapings).

Genus Neoguraleus n. gen.

Type: Drillia sinclairi Gillies 1882.

A considerable amount of work on the New Zealand Turrids has been done by Dr. H. J. Finlay, but only a few of his conclusions have been published. The Finlay collection was acquired by the Auckland Museum in 1937, and with it Dr. Finlay generously donated his manuscript of the Turrids. This work is incomplete owing to the difficulty he had in securing examples of foreign genotypes. However, by using a system of symbols he has allocated and keyed a large number of New Zealand Recent and fossil species. One group dealt with is that typified by Drillia sinclairi, for which I now provide the above new name.

The group seems to be confined to New Zealand, occurring Recent and not lower than the Waitotaran (Lower Pliocene). It resembles the Australian genus *Guraleus* in shape, size, sculpture and subsutural sinus, but has a very different protoconch. In *picta* Adams and Angas, the genotype of *Guraleus*, the protoconch is polygyrate, dome-shaped and smooth. In *Neoguraleus* it is polygyrate also, but only the tip, one to one and a-half whorls, is smooth, the remaining embryonic whorl being fenestrate—heavy spiral keels and weak, closely spaced axials.

The genus includes besides the genotype and a number of

new species:-

Pleurotoma (Mangilia) goodingi Smith 1884, Mangilia huttoni Smith 1915, Mangilia subaustralis Suter 1899, Asperdaphne murdochi Finlay 1924 (n.n. for Clathurella corrugata Murdoch 1900), Drillia lyallensis Murdoch 1905, Guraleus tenebrosus Powell 1926, Drillia amoena Smith 1884, and probably Mangilia cophinodes Suter 1908. In addition to these Recent species (murdochi type from the Upper Pliocene occurs Recent also) there are the following Tertiary representatives: Daphnella protensa Hutton 1885, Mangilia morgani Marwick 1924, and Guraleus ngatuturaensis Bartrum and Powell 1928.

Three of the above species were collected at Stewart Island: sinclairi, murdochi, and lyallensis; and Suter 1913 recorded amoena under the name of Mangilia protensa Hutton.

SIPHONARIIDAE.

Genus Kerguelenia Rochebrune and Mabille 1889.

Type: Siphonaria redimiculum Reeve.

The finding of a new species of *Kerguelenia* common on the high-tidal rocks at Akers Point, Stewart Island, opens up the question of the nomenclatural status of the New Zealand species.

(1913 Man. N.Z. Moll., pp. 601-602) records the Magellanic lateralis Gould (including as synonyms redimiculum Reeve and tristensis Leach). The description is obviously composite, for the localities listed are Antipodes Islands; Auckland and Disappointment Islands; Campbell Island; Macquarie Island; Tasmania; Kerguelen Island; Patagonia; Straits of Magellan; and Falkland Islands. Details of the radula are cited from Hutton's (1883, Trans. N.Z. Inst., vol. 15, p. 143) observations on an Auckland Island specimen. In 1915, Iredale (T.N.Z.I., vol. 47, p. 478) proposed the name Kerquelenia innominata for this Neozelanic Siphonaria lateralis of Suter 1913, but without nominating a type, stating a type locality, or even providing a diagnosis. As there is more than one Neozelanic Subantarctic Kerguelenia, this name must be treated as indeterminable. Hedley in 1916 (Moll. Austr. Ant. Expd. Rep., vol. 4, pt. 1, pp. 61-62) ascribed the Macquarie Island Kerguelenia to redimiculum Reeve, noting that the form is "smoother than Reeve's figure and has the apex within the margin."

These are important differences, so the Macquarie Island shell represented by specimens collected in 1894 by the late Mr. A. Hamilton is described below as a new species.

Iredale's *innominata* cannot possibly be applied, for there is a second Subantarctic species as represented by a single specimen in my collection from the Bounty Islands. This has the apex within the margin, as in the Macquarie shells, but in a more median position, resulting in a regularly ovate outline. The ribbing also is more distant. Description is withheld until a series of specimens is available.

The Stewart Island species is quite distinct from both Subantarctic species in having the apex marginal at all stages of growth, and particularly in having coarse radial sculpture. The persistent marginal and even projecting position of the apex separates it from all the known species.

Kerguelenia stewartiana n. sp. Pl. 49, figs. 6 and 7.

Shell obliquely ovate-pyriform, reminiscent of *Crepidula*. Apex posterior, narrowly pointed, bent to the left and projecting well beyond the margin. This feature is constant during all growth stages. Sculptured with distinct, flattened, flexuous, rather broad radials, most of which are bifurcated over the latter half of the shell by an intermediate groove.

There are about 22 primary ribs, some being indistinct towards the posterior end, and most of the anterior ones are bifurcated. Colour of exterior pale greenish grey to olive; irregularly blotched with dark brown, apex dark purplish brown. Interior dark reddish brown, paler at margin, the linear interstices of the external ribs showing through as dark brown lines. Siphonal groove shallow, not conspicuous.

Diameter, 9.25 mm.; length, 13.75 mm.; height, 4.25 mm. *Holotype*: In Auckland Museum.

Locality: Aker's Point, Stewart Island. Common on seaweed covered rocks towards high water mark. First located by Mrs. R. H. Harrison.

Kerguelenia macquariensis n. sp. Pl. 49, figs. 9 and 10.

Shell elongate, ovate-quadrate. Apex within the margin near the posterior left. Surface smooth except for sub-obsolete radials, about ten along the posterior margin, being the only distinct ones. Colour dull light reddish-brown, interior darker brown in the apical area. Siphonal groove broad and shallow, well defined.

Diameter, 10 mm.; length, 15 mm.; height, 5 mm.

Holotype: In Dr. H. J. Finlay Collection, Auckland Museum.

Locality: Macquarie Island.

FLAMMULINIDAE.

Genus Fectola Iredale 1915.

Type (orig. desig.): Helix infecta Reeve.

Subgenus Subfectola n. subgen.

Type: Helix caputspinulae Reeve.

Iredale (1915 Trans. N.Z. Inst., Vol. 47, p. 482) placed caputspinulae in his Fectola, but the species lacks the sinused lip of that genus, although it has the characteristic radially ribbed protoconch. This sinus is so well marked a feature of Fectola, rendering the ribbing at all stages strongly retractive to the suture that caputspinulae and rakiura cannot be accommodated in that genus naturally. A new subgenus is therefore here proposed for these Charopa-like shells having a radially ribbed protoconch as in Fectola, but evenly arcuate radial ribbing without the subsutural sinus.

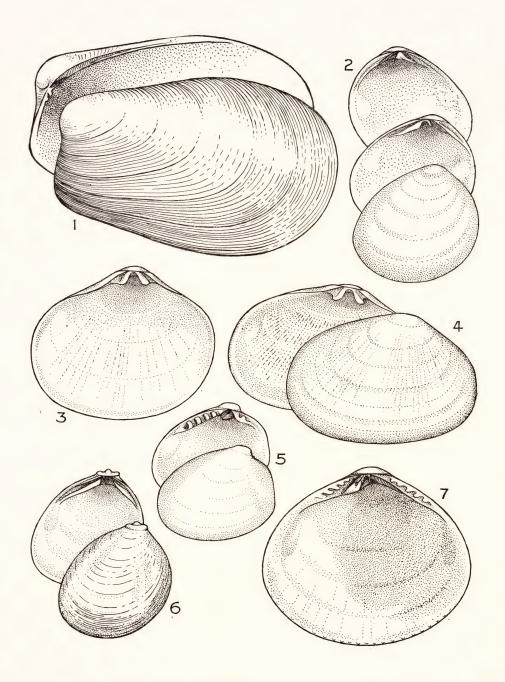
Fectola (Subfectola) rakiura n. sp. Text figures a, b, c (p. 224).

Related to *caputspinulae*, but much more finely and closely ribbed, and with a narrower umbilicus. In coiling and in sculpture it resembles *Mocella corniculum*, but the ribbing is closer and the umbilicus narrower. Colour white. Sculpture of exceedingly fine and close radials, about 34 per millimeter, and dense spiral striations: ribs very slightly flexuous, but not retractive at suture. Umbilicus about one quarter the major diameter of the base. Outer lip evenly arcuate, but not sinused at the suture. Spire little raised, one-third height of aperture. Whorls four, including a one-whorled protoconch of close radial ribs.

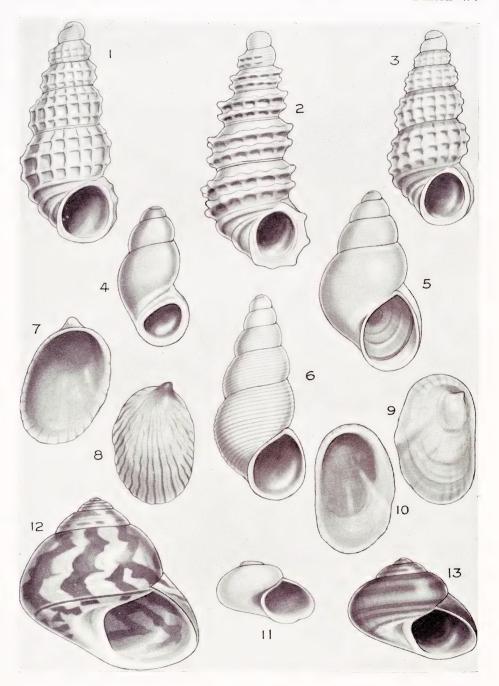
Diameter, 1.65 mm.; height, 0.8 mm.

Holotype: In Auckland Museum.

Locality: The Neck, Paterson Inlet, Stewart Island (under sides of leaves along bush track. Coll. A.W.B.P., Nov., 1934).



- Fig. 1. Kidderia rakiura Powell n. sp. Holotype (6.75 x 4.3 mm.).
- Fig. 2. Puyseguria tani Powell n. sp. Holotype (1.3 x 1.2 mm.).
- Fig. 3. Rochefortula taieriensis Powell n. sp. Holotype (2.6 x 2.2 mm.).
- Fig. 4. Rochefortula decapitata Powell n. sp. Holotype (2.8 x 1.95 mm.).
- Fig. 5. Austronucula schencki Powell n. gen. n. sp. Holotype (1.15 x 1 mm.).
- Fig. 6. Benthocardiella rakiura Powell n. sp. Holotype (1.15 x 1.2 mm.).
- Fig. 7. Legrandina turneri Powell n. sp. Holotype (2.75 x 2.4 mm.).



Merelina maoriana Powell n. sp. Holotype (3 x 1.3 mm.). Fig. 1. Fig. 2. Fig. 3. Fig. 4. Fig. 5. Merelina harrisonae Powell n. sp. Holotype (3.4 x 1.55 mm.).

Merelina taupoensis Powell n. sp. Holotype (2.8 x 1.2 mm.).

Scrobs trailli Powell n. sp. Holotype (1.5 x 0.8 mm.).

Zelaxitas rissoaformis Powell n. sp. Holotype (2.55 x 1.5 mm.).

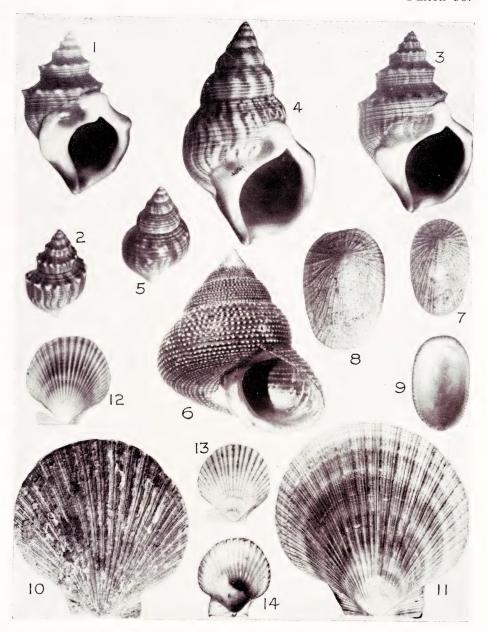
Fig. 6.

Subonoba edita Powell n. sp. Holotype (3 x 1.3 mm.).

Kerguelenia stewartiana Powell n. sp. Paratype.

Kerguelenia stewartiana Powell n. sp. Holotype (13.75 x 9.25 mm.). Fig. 7. Fig. 8. Figs. 9 & 10. Kerguelenia macquariensis Powell n. sp. Holotype (15 x 10 mm.).

Fig. 11. Zalipais turneri Powell n. sp. Holotype (1.05 x 0.75 mm.). Fig. 12. Margarella turneri Powell n sp. Holotype (7.75 x 8 mm.). Fig. 13. Margarella puysegurensis Powell n. sp. Holotype (5 x 5.5 mm.).



Figs. 1 & 2. Struthiolaria papulosa Martyn. Motuihi Island, Auckland (68 x 44 mm.).

Struthiolaria papulosa Martyn. Waikanae, Wellington (75 x 47 mm.). Fig. 3. Figs. 4 & 5. Struthiolaria papulosa gigas Sowerby. Stewart Island. (94 x 53 mm.).

Maurea (Mucrinops) punctulata ampla Powell n. subsp. Holotype. Fig. 6. $(43 \times 38.75 \text{ mm.}).$

Tugali stewartiana Powell n. sp. Holotype (21.75 x 13.5 mm.). Fig. 7.

Figs. 8 & 9. Tugali stervartiana Powell n. sp. Paratypes. Fig. 10. Chlamys campbellicus Odhner 1924. 40-50 fath. C. Saunders

(68 x 67 mm.).

Chlamys campbellicus Odhner 1924, 50 fath, off Macquarie Id. Fig. 11. (69 x 68 mm.).

Chlamys campbellicus Odhner 1924. 50 fath. off Macquarie Id. Fig. 12. Figs. 13 & 14. Chlamys campbellicus Odhner 1924. Stewart Island. $(30 \times 27.5 \text{ mm.}).$